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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/708,739	03/22/2004	David Elder	RP-002	2738

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EXAMINER

TIBBITS, PIA FLORENCE

ART UNIT	PAPER NUMBER
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2838

DATE MAILED: 08/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/708,739

Applicant(s)

ELDER ET AL.

Examiner

Pia F. Tibbits

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10/14/2004, 2/8/2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 3-29 and 63-65 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3-29, 63 and 65 is/are rejected.
- 7) ☒ Claim(s) 64 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 February 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>10/14/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This Office action is in answer to the amendments filed 10/14/2004 and 2/8/2005, and the terminal disclaimer filed 4/21/2005. Claims 1, 3-29, 63-65 are pending.

Drawings

1. The drawings are objected to because there were 2 sets of drawings submitted 10/14/2004 and 2/8/2005. It is not clear whether they replace the previously submitted drawings. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement-drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the sensors 710, 720, 730, 740, the switch position sensor, the trigger must be clearly shown or the feature(s) canceled from the claim(s). No new matter should be entered. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement-drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the

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replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

3. Newly added claim 64 is objected to because of the following informalities: claim 64 depends upon claim 30, a canceled claim. Accordingly, the new claim 64 has not been further treated on the merits.

4. Claim 1 is objected to because of the following informalities: "wherein a first operating position" should be replaced by --- wherein in a first operating position---. Appropriate correction is required.

Art Rejection Rationale

5. At the outset, the examiner notes that claims are to be given their broadest reasonable interpretation in light of the supporting disclosure. *In re Zletz*, 893 F.2d 319, 321, 13 USPQ 2d 1320, 1322 (Fed. Cir. 1989); *In re Prater*, 415 F.2d 1393, 1404, 162 USPQ 541, 550 (CCPA 1969); *In re Yamamoto*, 740 F.2d 1569, 222 USPQ 934 (Fed. Cir.1984); *Burlington Indus. V. Quigg*, 822 F.2d 1581, 3 USPQ 2d 1436 (Fed. Cir. 1987); *In re Morris*, 43 USPQ 2d 1753, 1756 (Fed. Cir. 1997). ("During patent examination the pending claims must be interpreted as broadly as their terms reasonably allow.... The reason is simply that during patent prosecution when claims can be amended, ambiguities should be recognized, scope and breadth of language explored, and clarification imposed.... An essential purpose of patent examination is to fashion claims that are precise, clear, correct, and unambiguous. Only in this way can uncertainties of claim scope be removed, as much as possible, during the administrative process."). In responding to this Office action, applicants are reminded of the requirements of 37 CFR 1.111 and 1.119 that applicants specifically point out the specific distinctions believed to render the

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claims patentable over the references in presenting responsive arguments. See MPEP 714.02. The support of any amendments made should also be specifically pointed out. See MPEP 2163.06.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 1, 3-8, 10-18, 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Nowakowski** [4516066].

As to claim 1, Nowakowski discloses a multiple battery system operating an electrical system comprising: a main battery 30 having a main positive output and a main negative output [see figure]; at least one standby battery 26 having an at least one standby positive output and an at least one standby negative output [see figure]; and a main electrical circuit [see figure] comprising a coupling of a common positive terminal 46 with an at least one switching device 44, the at least one switching device having at least two operating positions to selectively couple the main 30 or the at least one standby battery 26 to the common positive terminal to operate the electrical system, wherein a first operating position of the at least two operating positions the main battery positive output is coupled to the common positive terminal 44 and the main battery operates the electrical system and an at least one one-way charging circuit is coupled to the common positive terminal and the positive output of the standby battery providing charging to at least one of the at least one standby battery; and a controller 42 coupled to the main electrical circuit and switching said at least one switching device based on input from an at least one sensor [see column 4, lines 20-24]. Nowakowski does not disclose specifically a first operating position or two operating positions. However, Nowakowski discloses that the voltage regulator 42 senses the voltage between conductor 34 and ground via conductor 50 and when this voltage exceeds the desired regulated

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value, it causes the transistor 44 to switch off. Thus each time the transistor 44 goes nonconductive, a pulse of current is supplied to the battery 30 and the frequency of these pulses of current will depend upon the switching frequency of the transistor 44, and this charging mode for charging battery 30 by field discharge current continues as long as a controlled rectifier 120 remains nonconductive in its anode-cathode circuit, i.e., the at least one standby battery 26 powers the circuit. When the controlled rectifier 120 is gated conductive in its anode-cathode circuit, the voltage is applied to the accessory battery 26. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made that the (A) prior art element performs the function specified in the claim, (B) is not excluded by any explicit definition provided in the specification for an equivalent, and (C) is an equivalent of the means- (or step-) plus-function limitation, so that the prior art element performs the identical function specified in the claim in substantially the same way, and produces substantially the same results as the corresponding element disclosed in the specification. ***Kemco Sales, Inc. v.***

Control Papers Co., 208 F.3d 1352, 54 USPQ2d 1308 (Fed. Cir. 2000)

As to claims 3-8, 10, 13, 14-17, see reference and remarks for claim 1 above.

As to claim 11, Nowakowski discloses the battery system further comprises a battery housing with a main battery compartment containing the main battery and an at least one standby battery compartment containing the at least one standby battery [see column 2, lines 20-25]. Nowakowski does not disclose the main battery compartment is located atop the at least one standby battery compartment. With regard to the particular location of the main battery compartment, i.e., located atop the at least one standby battery compartment, absent any criticality, is only considered to be an obvious modification in order to meet the user's needs as it has been held by the courts that there would be no invention in shifting the location of a structure of a device to another location if the operation of the device would not thereby be modified. ***In re Japikse***, 181 F.2d 1019, 86 USPQ 70 (CCPA 1950) MPEP 2144.04

As to claim 12, Nowakowski does not disclose the main battery compartment is located aside the at least one standby battery compartment. With regard to the particular location of the main battery compartment, i.e., located aside the at least one standby battery compartment, absent any criticality, is

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only considered to be an obvious modification in order to meet the user's needs as it has been held by the courts that there would be no invention in shifting the location of a structure of a device to another location if the operation of the device would not thereby be modified. *In re Japikse*, 181 F.2d 1019, 86 USPQ 70 (CCPA 1950) MPEP 2144.04.

As to claim 18, see reference and remarks for claim 1 above. Additionally, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a plurality of auxiliary batteries, in order to meet the user's needs, since it has been held that mere duplication of parts has no patentable significance unless a new and unexpected result is produced. *In re Harza*, 274 F.2d 669, 124 USPQ 378 (CCPA 1960) and MPEP 2144.04.

As to claim 29, the multiple batteries being one of a six-volt, a twelve-volt, a fourteen-volt, and a twenty-four volt battery electrical system: it would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide a selection for the voltage of the multiple batteries in order to optimally accommodate the user's system, since it has been held that discovering an "optimum" or "preferred" value for a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

8. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Nowakowski**, as described above, in view of **Tremblay** [4924176].

As to claim 9, Nowakowski does not disclose the indicator element being a plurality of indicator elements having at least one of a red, orange, green, or amber color.

Tremblay discloses a plurality of indicator elements having at least one of a red, and green color since red and green colors are generally preferred because these colors are easily associated with danger and action [see abstract; column 3, lines 52-55]. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Nowakowski's multiple battery system and include a plurality of indicator elements having at least one of a red, and green color,

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as disclosed by Tremblay, in order to indicate danger and action in association with the functions of the batteries.

9. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Nowakowski**, as described above, in view of **Hasegawa et al.** [hereinafter Hasegawa][6639384].

As to claim 19, Nowakowski does not disclose the at least one sensor further comprises an at least one of: an at least one main battery voltage sensor, an at least one main battery amperage sensor, an at least one standby battery voltage sensor, a standby battery amperage sensor, an at least one switch position sensor.

Hasegawa discloses in fig. 1 a multiple battery system comprising main battery voltage/amperage sensor 18a, and standby battery voltage voltage/amperage sensor 18b [see column 4, lines 44-49]. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Nowakowski's multiple battery system and include battery voltage/amperage sensors, as disclosed by Hasegawa, in order to improve the accuracy of the input circuit.

As to the an at least one switch position sensor, Nowakowski discloses LED 98 lighting up when the terminal voltage of battery 30 is high, i.e., in a broad sense acts as one switch position sensor.

10. Claims 20-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Nowakowski**, as described above, in view of **Olson** [6727602].

As to claim 20, Nowakowski does not disclose wherein the controller further comprises at least one of: an at least one microprocessor, an at least one signal processor, an at least one set of lookup tables, an at least one memory device, an at least one security protocol/encryption element and an at least one indicator element.

Olson discloses a system and method for drawing charge from two or more batteries under the control of a power controller/microprocessor, wherein the power controller may control and monitor the amount and rate of discharge/the amount and rate of charging. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Nowakowski's

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multiple battery system and include a power controller, as disclosed by Olson, in order to control and monitor the amount and rate of discharge/the amount and rate of charging.

As to claims 21-26, Olson states that his power supply may be used with devices provided with wireless Bluetooth technology. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine Nowakowski's and Olson's teachings in order to control and monitor the amount and rate of discharge/the amount and rate of charging of batteries in a location convenient to the user, his or her vehicle.

As to claim 27, the controller includes a trigger that signals the controller to periodically change the switch position of the at least one switching device so as to discharge the at least one standby battery in the second operating position of the at least two operating positions for periods of time and then switches back to the first operating position of the at least two operating positions: it is an inherent for a controller to include a timer to trigger pre-programmed operations, and MPEP 2100 states that the disclosure of a limitation may be expressed, implicit or **inherent**.

11. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Nowakowski** and **Olson**, as described above, in view of **Hasegawa**, as described above.

As to claim 28, Nowakowski and Olson do not disclose an at least one VI sensor.

Hasegawa discloses in fig. 1 a multiple battery system comprising main battery voltage/amperage sensor 18a, and standby battery voltage voltage/amperage sensor 18b [see column 4, lines 44-49]. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Nowakowski's and Olson's multiple battery system and include battery voltage/amperage sensors, as disclosed by Hasegawa, in order to improve the accuracy of the input circuit.

12. Claims 1, 63, 65 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Dougherty et al.** [hereinafter Dougherty][5316868].

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As to claim 1, Dougherty discloses in figures 1-3c a multiple battery system operating an electrical system comprising: a main battery having a main positive output and a main negative output; at least one standby battery having an at least one standby positive output and an at least one standby negative output; and a main electrical circuit comprising a coupling of a common positive terminal with an at least one switching device, the at least one switching device having at least two operating positions to selectively couple the main or the at least one standby battery to the common positive terminal to operate the electrical system, wherein a first operating position of the at least two operating positions provides electrical charge to the main battery and recharges the at least one standby battery by coupling the common positive terminal to the main positive output and an at least one one-way charging circuit and operates the electrical system from the main battery; and a controller coupled to the main electrical circuit and switching said at least one switching device based on input from an at least one sensor [see column 2, lines 50-68; column 3, line 10, 19, 27-32]. Dougherty does not disclose specifically a first operating position or two operating positions. However, US 5002840, which is incorporated by reference in the '868 patent, discloses that the circuit 108 functions as a protective charge maintenance circuit by allowing a low level current to pass from the vehicle generator to reserve battery 204. At the same time, circuit 108 prevents current from flowing in the opposite direction, thereby maintaining reserve/standby battery 204 in the charged condition during non-use [see column 12, lines 56-62]. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made that the (A) prior art element performs the function specified in the claim, (B) is not excluded by any explicit definition provided in the specification for an equivalent, and (C) is an equivalent of the means- (or step-) plus-function limitation, so that the prior art element performs the identical function specified in the claim in substantially the same way, and produces substantially the same results as the corresponding element disclosed in the specification. ***Kemco Sales, Inc. v. Control Papers Co.***, 208 F.3d 1352, 54 USPQ2d 1308 (Fed. Cir. 2000)

As to claims 63, 65, see remarks and references for claim 1 above.

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13. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Information Disclosure Statement

14. The reference 489242 cited in the IDS filed on 10/14/2004 has not been considered, as it is not a valid US patent number. Additionally, it is not clear why applicant incorporated in this IDS references already disclosed by examiner in a previous Office action, e.g., US 5162164. Appropriate correction is required.

15. Patent applicant has duty not just to disclose pertinent prior art references but to make the disclosure in such way as not to "bury" it within other disclosures of less relevant prior art; See *Golden Valley Microwave Foods Inc. v. Weaver Popcorn Co. Inc.*, 24 USPQ2d 1801 (N.D.I. 1992); *Molins PLC v. Textron Inc.*, 26 USPQ2d 1889, at 1899 (D.Del. 1992); *Penn Yan Boats, Inc. v. Sea Lark Boats, Inc. et al.*, 175 USPQ 260, at 272 (S.D. Fl. 1972).

16. Significantly, an applicant's duty of disclosure of material and information is not satisfied by presenting a patent examiner with "a mountain of largely irrelevant [material] from which he is presumed to have been able, with his expertise and with adequate time, to have found the critical [material]. It ignores the real world conditions under which examiners work." *Rohm & Haas Co. v. Crystal Chemical Co.*, 722 F.2d 1556, 1573 [220 USPQ 289] (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984). (Emphasis in original).

Response to Arguments

17. Applicant's arguments with respect to the claims have been considered but are moot in view of the new grounds of rejection. Applicant amended the independent claim 1 to include "and an at least one

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one-way charging circuit is coupled to the common positive terminal and the positive output of the standby battery providing charging to at least one of the at least one standby battery", which is new issue.

Conclusion

18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art cited in PTO-892 and not mentioned above disclose related apparatus.

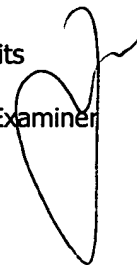
19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Pia Tibbits whose telephone number is 571-272-2086. If unavailable, contact the Supervisory Patent Examiner Mike Sherry whose telephone number is 571-272-2084. The Technology Center Fax number is 571-273-8300.

20. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PFT

August 5, 2005

Pia Tibbits
Primary Patent Examiner

A handwritten signature in black ink, appearing to be 'Pia Tibbits', written over the printed name and title.